UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Application No.

09/670,761

Applicant(s)

FARMER ET AL.

Examiner

Adam L Basehoar

Art Unit

2178

Office Action Summary

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _27 September 2000_.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-58_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-58_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _27 September 2000_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _4_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: The Application filed on 09/27/00 and the

IDS filed on 02/20/01.

2.   Claims 1-58 are pending in the case. Claims 1, 10, 19, 29, 33, 37, 41-45, 50, and 55-58

are independent claims.

Claim Objections

3.   Claim 23 objected to because of the following informalities: Claim 23 appears to be an

exact duplicate and thus contains the same limitations of claim 22. Since claim 23 depends from

claim 22, the examiner assumes that claim 23 was an accidental duplicate and as such should be

removed from consideration as it does not further define/limit the scope of the invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-44 and 55-58 rejected under 35 U.S.C. 102(e) as being anticipated by Truelson

(US: 6,223,191 04/24/01).

-In regard to independent claims 1, 10, and 19, Truelson teaches a method, system,

and program code for identifying possible lines within a paragraph in a top-down pass through

the paragraph (column 2, lines 50-67);

selecting a combination of possible lines in a bottom-up pass through the possible lines

(columns 11 & 12, 64-67 & 1-6); and specifying a layout for the paragraph according to the

selected combination (column 2, lines 61-64).

-In regard to dependent claims 2, 11, and 20, Truelson teaches calculating a penalty for

each of the possible lines independently of the other lines (column 2, lines 51-53); and

selecting the combination of lines based on the penalty calculations (column 2, lines 61-

64).

-**In regard to dependent claims 3, 12, and 21**, Truelson teach calculating in a top-down

pass, a penalty for each of the possible lines (column 2, lines 50-65)(Fig. 6A);

accruing the penalties over each of the downward sequences of the possible line (column

2, lines 61-63); and

before selecting the combination of the possible lines, pruning the possible lines and

associated sequences of possible lines for which the accrued penalty does not satisfy a

benchmark penalty (column 2, lines 53-60).

-**In regard to dependent claims 4, 13, 22, 23, 30, 34, and 38**, Truelson teach calculating

the penalty for each of the possible lines as it is identified (column 2, lines 51-53); and

terminating identification of additional possible lines in the sequence associated with one

of the possible lines if the accrued penalty for the line does not satisfy a benchmark penalty

(column 2, lines 53-60).

-**In regard to dependent claims 5, 14, and 24**, Truelson teach accruing the penalties

calculated in the top-down pass for each of the upward sequences of the possible lines (columns

11 & 12, lines 64-67 and 1-6); and

selecting in the bottom-up pass those lines for which the accrued penalty is lowest

(column 2, lines 61-63).

   -In regard to dependent claims 6, 15, 25, 31, 35, and 39, Truelson teach wherein the

penalty calculations for each of the possible lines includes penalties based on the width (letter

spacing) of the respective line relative to the width of an applicable baseline (column 7, lines 1-

24)(Fig. 6A: '0+0+0+20=20').

   -In regard to dependent claims 7, 16, 26, 32, 36, and 40, Truelson teach wherein the

width (length of a line) of the applicable baseline varies (different letter spacing) between

different baselines (column 7, lines 1-24) (Fig. 7B). Truelson also teach wherein the width of the

applicable baseline varies between different baselines based on applicable format parameters

such as margins (column 2, lines 40-49).

   -In regard to dependent claims 8, 17, and 27, Truelson teach wherein the size of text

within the different baseline varies based on format parameters such as different font size

(column 2, lines 40-49).

   -In regard to dependent claims 9, 18, and 28, Truelson teach wherein the paragraph is

contained within an arbitrary shaped paragraph cell, wherein the shape of the selected paragraphs

in Figures 5B and 7B are different (Figs: 5B & 7B).

   -In regard to independent claims 29, 33, and 37, Truelson teach identifying possible

lines within a paragraph in a top-down pass through the paragraph, each of the possible lines

yielding a downward sequence of additional possible lines (column 2, lines 50-67)(Fig. 6B);

calculating, in a top down pass a penalty for each of the possible lines independently of

each other (column 2, lines 51-53);

accruing the penalties over each of the downward sequences of the possible lines in the

top down pass (column 2, lines 61-63);

pruning the possible lines and associated sequences of possible lines for which the

accrued penalty does not satisfy a benchmark penalty (column 2, lines 53-60);

selecting a combination of the possible lines remaining after the pruning in a bottom up

pass through the possible lines based on the penalties accrued over upward sequences of possible

lines (columns 11 & 12, 64-67 & 1-6); and

specifying a layout for the paragraph according to the selected combination (column 2,

lines 61-64).

-**In regard to independent claims 41 and 42**, Truelson teach defining a paragraph cell

for layout of a paragraph (Fig. 5B), the cell including a sequence of baselines for placement of

lines of text information, where at least some of the baselines have different widths (columns 2

& 7, lines 40-49 & 1-24) (Fig. 7B);

identifying possible lines within a paragraph in a top-down pass through the paragraph,

each of the possible lines, characterized by a line start (Fig. 3: 303, 304, and 305), yielding a

downward sequence of additional possible lines (column 2, lines 50-67)(Fig. 6B);

calculating, in a top down pass a penalty for each of the possible lines independently of

each other (column 2, lines 51-53);

accruing the penalties over each of the downward sequences of the possible lines in the

top down pass (column 2, lines 61-63);

pruning the possible lines and associated sequences of possible lines for which the

accrued penalty does not satisfy a benchmark penalty (column 2, lines 53-60);

selecting a combination of the possible lines remaining after the pruning in a bottom up

pass through the possible lines based on the penalties accrued over upward sequences of possible

lines (columns 11 & 12, 64-67 & 1-6); and

specifying a layout for the paragraph according to the selected combination (column 2,

lines 61-64).

-In regard to independent claims 43 and 44, Truelson teach identifying a subset of

possible lines within a paragraph in a top down pass (column 2, lines 50-67)(Fig. 6B);

selecting a combination of possible lines from the identified subset in a bottom up pass

through the subset of possible lines (columns 11 & 12, 64-67 & 1-6); and

specifying a layout for the paragraph according to the selected combination (column 2,

lines 61-64).

-In regard to independent claims 55 and 56, Truelson teach identifying possible lines

within a paragraph in a top-down pass through the paragraph (column 2, lines 50-67)(Fig. 6B);

calculating, in a top down pass a penalty for each of the possible lines (column 2, lines

51-53);

accruing the penalties over each of the downward sequences of the possible lines in the

top down pass (column 2, lines 61-63);

pruning the possible lines and associated sequences of possible lines for which the

accrued penalty does not satisfy a benchmark penalty (column 2, lines 53-60); and

wherein the accrued penalty for one of the sequences does not satisfy the benchmark

penalty, terminating further compilation of the respective sequence (columns 2 & 6, lines 53-60

& 32-37).

-In regard to independent claims 57 and 58, Truelson teach identifying a complete

paragraph layout solution by expanding partial paragraph layout solutions (column 2, lines 50-

67)(Fig. 6B);

comparing a penalty for each of the partial paragraph layout solutions to a

benchmark penalty corresponding to a known complete paragraph layout solution (column 2,

lines 53-60); and

wherein the accrued penalty for one of the partial paragraph solutions does not

satisfy the benchmark penalty, terminating further compilation of the respective sequence

(columns 2 & 6, lines 53-60 & 32-37).

6.   Claims 45-48 and 50-53 are rejected under 35 U.S.C. 102(a) as being anticipated by

Microsoft's, "Microsoft Word 2000," 1999, pp. 1-7.

-In regard to independent claims 45 and 50, Microsoft Word teaches defining a

paragraph layout for a paragraph of text (page 2);

detecting a change to the paragraph of text , wherein the change includes at least one of a

change to the text (deletion of the word "writing": see pages 3 and 4) and a change to a

paragraph cell in which the text was positioned (change to margin of paragraph cell: see pages 2

and 5); and

globally redefining the paragraph layout in real time in response to the detected change

(notice real time changes with respect to pages 3 and 4 as well as 2 and 5).

-In regard to dependent claims 46 and 51, Microsoft Word teaches wherein the change

includes the deletion of text (deletion of the word "writing": see pages 3 and 4).

-In regard to dependent claims 47 and 52, Microsoft Word teaches wherein the change

includes the change in the size and shape of the paragraph cell (change to margin of paragraph

cell: see pages 2 and 5).

-In regard to dependent claims 48 and 53, Microsoft Word teaches wherein the change

includes the addition of imagery within the paragraph cell (Addition of image to paragraph cell:

see pages 2 and 7).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 49 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Microsoft's, "Microsoft Word 2000," 1999, pp. 1-7 in view of Truelson (US: 6,223,191

04/24/01)

-In regard to dependent claims 49 and 54, Microsoft Word do not teach identifying

possible lines within a paragraph in a top-down through the paragraph; selecting a combination

of the possible lines in a bottom-up pass through the possible lines; and specifying the redefined

paragraph layout according to the selected combination. Truelson teaches identifying possible

lines within a paragraph in a top-down through the paragraph (column 2, lines 50-67); selecting a

combination of the possible lines in a bottom-up pass through the possible lines (columns 11 &

12, 64-67 & 1-6); and specifying the redefined paragraph layout according to the selected

combination (column 2, lines 61-64). It would have been obvious to one of ordinary skill in the

art at the time of the invention, for Microsoft Word to have used the method of Truelson,

because Truelson taught that said method resulted a formatted text paragraph that was both easier

to read and more aesthetically appealing because it will have fewer hyphenated words, letter

spaced words, or related undesirable formatting characteristics (column 3, lines 1-6).

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

US: 6,510,441	01-2003	Kenninga, Eric
US: 6,647,533	11-2003	Liu et al.
US: 6,288,726	09-2001	Ballard, Dean
US: 6,321,243	11-2001	Ballard, Dean

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Adam L Basehoar whose telephone number is (703) 305-7212.

The examiner can normally be reached on M-F: 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on (703) 308-5186. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEPHEN S. HONG
PRIMARY EXAMINER